STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION
AUGUSTA, MAINE
04333-0016

JOHN ELIAS BALDACCI
GOVERNOR

DAVID A. COLE
COMMISSIONER

June 10, 2004
Subject: Guilford
Project No. STP-9200(100)X
PIN: 9200.10
Bid Amendment No. 1

Dear Sir/Ms.:

Please make the following change to your Bid Package:

Delete "Special Provision Section 203 Excavation and Embankment (Instrumented Pavement Test Section)" dated May 21, 2004, three pages total and replace with the attached "Special Provision Section 203 Excavation and Embankment (Instrumented Pavement Test Section)" dated 6/4/2004, three pages total.

Consider this change prior to submitting your bid on June 16, 2004.

Sincerely,

FOR
Scott Bickford
Contracts & Specifications Engineer

Guilford
9200(100)X
6/4/2004

SPECIAL PROVISION
SECTION 203
EXCAVATION AND EMBANKMENT
(Instrumented Pavement Test Section)

Description. The Maine Department of Transportation (MaineDOT) in conjunction with the University of Maine and Worchester Polytechnic Institute (WPI) will be installing instrumentation to monitor pavement performance. The instrumentation will be installed at approximately Station 3+620.

INSTRUMENTATION

Instrumentation, General. Instrumentation will be installed by the University of Maine and MaineDOT to monitor the performance of the roadway. The successful construction and instrumentation of the instrumented section will require mutual cooperation and close coordination between the Contractor, the Maine Department of Transportation and the University of Maine.

1. The University of Maine will be responsible for acquisition and installation of all instrumentation. In some cases, MaineDOT and WPI will assist with installation.
2. The University of Maine will work closely with MaineDOT and the Contractor to coordinate the construction schedule with the instrumentation and monitoring schedule. A University and MaineDOT representative will be on site to install instrumentation as dictated by the Contractor's construction schedule.
3. The Contractor's construction schedule shall take into account the timing of the instrumentation installation and shall in no way interfere with or delay these activities.
4. The Contractor will take all necessary precautions to prevent damage, disturbance or movement, other than normal settlement, of instrumentation installed.
5. The Contractor shall immediately notify the Engineer of any damage, disturbance or movements to any of the monitoring devices. In the event MaineDOT reinstalls monitoring devices destroyed or damaged by the Contractor, the cost of reinstallation will be charged against the Contractor and will be deducted from payments due him.

Instrumentation, Subgrade/Subbase. A general description of instrumentation installed in the subgrade soil and subbase is given below. Only instrumentation installed during construction is listed. Additional instruments will be installed after construction is completed.

Soil pressure gages. Approximately four soil pressure gages will be installed. The gages are approximately 9 in. in diameter. Gages will be placed on the subgrade and within the subbase course. The soil or aggregate underneath the gage shall be compacted by the Contractor prior to placement of the gages by the Engineer. After the gage is placed, the Contactor shall place a 6 to 12-in. lift of

subbase aggregate over the gage, as directed by the Engineer, and compact in accordance with Section 203. Wires will lead from each gage to the shoulder of the road.

Soil strain gages. Approximately four soil strain gages will be installed. The Engineer will place the gages in the subgrade soil and within the subbase course. After a gage is placed, the Contactor shall place a 6 to 12-in. lift of material over the gage, as directed by the Engineer, and compact in accordance with Section 203. Wires will lead from each gage to the shoulder of the road.

Soil moisture gages. Approximately six soil moisture gages will be installed. The gages will be installed in the subgrade soil and within the subbase course. After a gage is installed, the Contractor shall place a 6 to 12-in. lift of material over the gage, as directed by the Engineer, and compact in accordance with Section 203. Wires will lead from each gage to the shoulder of the road.

Subsurface thermocouple strings. Approximately two thermocouple strings will be installed. Thermocouple strings are installed in 4-in. diameter boreholes drilled by the Maine Department of Transportation. The borings will be made prior to excavation and the borings will be held open with casing. During excavation to subgrade the Contractor will need to work around these casings. The strings are generally installed immediately after excavation to subgrade. The Contractor shall use an excavator to pull the casing at the direction of the Engineer. The thermocouples are mounted on 1-in. diameter wooden dowels. The dowel is placed in the borehole and the borehole is backfilled with subgrade soil by the Engineer. The dowel will extend up through the subbase course to within about 12 in. of finished grade. During subbase placement the Contractor shall work around the upper, exposed portion of the dowel. A bundle of wires will lead from each string to the shoulder of the road.

Subsurface soil resistivity gages. Approximately two soil resistivity gages will be installed. Soil resistivity gages are installed in 4-in. diameter boreholes drilled by the Maine Department of Transportation. The borings will be made prior to excavation and the borings will be held open with casing. During excavation to subgrade the Contractor will need to work around these casings. The gages are generally installed immediately after excavation to subgrade. The Contractor shall use an excavator to pull the casing at the direction of the Engineer. The gages are mounted on 1-in. diameter rods. The rod is placed in the borehole and the borehole is backfilled with subgrade soil. The rod will extend up through the subbase course to within about 12 in. of finished grade. During subbase placement the Contractor shall work around the upper, exposed portion of the rod. A bundle of wires will lead from each rod to the shoulder of the road.

Instrumentation, Hot Mix Asphalt. A general description of instrumentation installed in the pavement is given below. Only instrumentation installed during construction is listed.

Hot Mix Asphalt strain gages. Approximately 24 Hot Mix Asphalt strain gages will be installed. The gages will be installed at two or three depths in the HMA. The gages are either placed on the top of a previously placed HMA layer or placed in the HMA immediately after a layer is spread, but prior to compaction. A wire will lead from each gage to the shoulder of the road. The location of gages and wires will be documented. This section of pavement will be excluded from Acceptance testing of in-place density. The Contractor shall obtain informational core samples in this area as directed by the Department. These cores will be for the purposes of research only, and will not be used in the Quality Assurance process.

Hot Mix Asphalt thermocouples. Approximately six thermocouples will be installed in the HMA. The thermocouples are either placed on the top of a previously placed HMA layer or placed in the HMA immediately after a layer is spread, but prior to compaction. A wire will lead from each thermocouple to the shoulder of the road. The location of gages and wires will be documented. This section of pavement will be excluded from Acceptance testing of in-place density. The Contractor shall obtain informational core samples in this area as directed by the Department. These cores will be for the purposes of research only, and will not be used in the Quality Assurance process.

CONSTRUCTION REQUIREMENTS

Schedule. Excavation to subgrade and placement of subbase between Station 3+560 and 3+720 shall begin no sooner than September 1, 2004.